

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**



**PATENT**

In re application of: Mathew et al.

Attorney Docket No.:NSC1P127/NS4269

Application No.: 09,256,702

Examiner: D. Nguyen

Filed: February 24, 1999

Group: 2871

**Title: LIQUID CRYSTAL DISPLAY ASSEMBLY  
FOR REDUCING OPTICAL DEFECTS**

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail to: Commissioner for Patents, Box AF, Washington, DC 20231 on August 20, 2001.

Signed:

Deborah Neill

**RESPONSE A**

Assistant Commissioner for Patents

Box: Amendment Fee

Washington, D.C. 20231

Sir:

This is in response to the Office Action mailed April 25, 2001. Reconsideration of the captioned application in view of the following amendments and remarks is respectfully requested.

**AMENDMENTS**

**In the Claims:**

Please amend the claims as follows:

*Q1* 5. (Once Amended) A packaged liquid crystal display as recited in claim 4 wherein the substrate includes one of aluminum or ceramic.

*Q2* 9. (Once Amended) A packaged liquid crystal display as recited in claim 1 further including a thermal support material and wherein the thickness of the thermal support material is between approximately 0.3 mm and 0.8 mm.

*92*  
*Cont* 10. (Once Amended) A packaged liquid crystal display as recited in claim 9 wherein thermal support material is a thermal grease.

*93* 20. (Once Amended) The method of claim 14 wherein the thermal support material is disposed such that none of the plurality of spaced apart stabilizers are dispensed below the liquid crystal cell.

*In the Drawings:*

Please amend Figures 6 and 9 as shown in the attached red-lined drawings.

*In the Specification:*

Please replace the paragraph beginning at page 5, line 26, with the following rewritten paragraph:

*a4* -- In another embodiment, a method for constructing the LCD assembly is described. As a result of the reduced temperature sensitive curing involved in the present invention, cycle time, or the time required to construct the LCD assembly, is reduced to less than five hours.

Please replace the paragraph beginning at page 8, line 10, with the following rewritten paragraph:

*a5* -- Referring initially to Figures 6-9, a small scale liquid crystal display (LCD) assembly 600 according to one embodiment of the present invention will be described. The liquid crystal display 600 includes a substrate 602 having a recess 604 that acts as a containment chamber for receiving a die 606 attached to a transparent plate 608. A liquid crystal material is disposed between the die 606 and the transparent plate 608. Generally, the die 606, the transparent plate 608 and the liquid crystal material and other components between the die and transparent plate are collectively referred to as an LCD cell 609. The die 606 includes a pixel array 610 and a plurality of die bond pads 612. The pixel array 610 is responsible for producing the images that are shown on the liquid crystal display. The die bond pads 612 allow electrical communication with external devices. A cantilevered ground trace 622 passively contacts the transparent plate 608 to further ground the LCD cell.

Please replace the paragraph beginning at page 9, line 4, with the following rewritten paragraph:

*a6* -- In the embodiment shown, a pair of the stabilizers 624 also act, along with a barrier 626, to retain an elastomeric encapsulating material (not shown in Figure 6) used to protect bonding wires 616 that electrically couple the die to external elements.